

CLAIMS

1. A sheet comprising at least a first ply  $P_1$  and a second ply  $P_2$  superimposed on each other and made of absorbent paper, such as tissue paper, each ply having a grammage of between 10 and 40 g/m<sup>2</sup>, the first said ply presenting on its outer side cavities formed by embossing, corresponding to protuberances on its other side adjacent to the second ply, characterized in that the first ply  $P_1$  comprises first zones  $A_1$  forming cells with some first cavities (12), the cells being surrounded by second zones  $A_2$  with second cavities (18), the first zones  $A_1$  being in relief on the outer side in relation to the second zones  $A_2$  with a level difference  $N_A$ , the first zones  $A_1$  presenting a contour D formed by a marking line.

2. The sheet as claimed in claim 1 whose depth of the first cavities (12) is at the most equal to the depth of the second cavities plus the level difference  $N_A$ .

3. The sheet as claimed in either of claims 1 and 2 comprising non-embossed third zones  $A_3$  between the second zones  $A_2$ .

4. The sheet as claimed in either of claims 1 or 2 comprising third embossed zones  $A_4$  between the second zones  $A_2$ .

5. The sheet as claimed in claim 4, characterized in that the embossing of third zones  $A_4$  comprises cavities of a linear shape and/or alignments of cavities.

6. The sheet as claimed in any one of claims 1 to 5 whose second cavities (18) are at least in part aligned with the contour D.

7. The sheet as claimed in any one of claims 1 to 6 whose first cavities (12) are tapered in shape.

8. The sheet as claimed in any one of claims 1 to 7 whose first zones  $A_1$  feature third cavities (20) with a top having a linear shape.

9. The sheet according to any one of the claims 1 to 8 whose second ply  $P_2$  is not embossed.

10. The sheet according to any one of claims 1 to 8 whose second ply  $P_2$  is embossed and presents protuberances, the two plies being in contact through the tops of the protuberances corresponding to the second cavities (18) and/or the tops of the third cavities (20).

11. The sheet as claimed in claim 9 or 10 whose two plies are bonded through at least one application of glue on the top of the second protuberances (18) and/or on the top of the third cavities (20).

12. The sheet as claimed in claim 11 whose first protuberances are not glued.

13. A device for the manufacture of a sheet as claimed in any one of claims 1 to 12 comprising at least one cylinder (100) with a rigid coating suitably engraved so as to present first zones  $A_1$  forming cells surrounded by second zones  $A_2$ , the first zones  $A_1$  comprising first picots (112) and the second zones  $A_2$  comprising second picots (118), the bottom of the engraving of the first zones being at a level  $N_i$ , in relation to the rotation axis of the cylinder, lower than level  $N$  of the bottom of the engraving of the second zones.

14. The device as claimed in claim 13 in which the top of the first picots (112) is at a level lower than the level  $N_s$  of the tops of the second picots (118).

15. The device as claimed in either of claims 13 or 14 whose transition surface between the first zones  $A_1$  and the second zones  $A_2$  consists at least partly of elements with a tapered surface (114) defining a gripping edge  $D_A$ .

16. The device as claimed in claim 15 in which the angle formed by the tangent of wall (114) at the level of edge  $D_A$  and the cylinder radius is between  $20^\circ$  and  $50^\circ$ , preferably between  $25^\circ$  and  $35^\circ$ .

17. The device as claimed in any one of claims 13 to 16 whose level difference N-Ni is between 0.1 mm and 1.3 mm.

18. The device as claimed in claim 17 whose level difference Ns-N is between 0.1 and 0.7 mm.

19. The device as claimed in claim 18 whose level difference Ns-Ni is between 0.2 and 2.0 mm.

20. A process for manufacturing a sheet as claimed in any one of claims 1 to 12 wherein a band of absorbent paper is embossed by means of a device as claimed in any one of claims 13 to 19.